

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A programmable unit, comprising:

at least one program operation unit for running a program;

a stopping device connected to said program operation unit, said stopping device issuing a stop command to said program operation unit to stop the running of the program by said program operation unit, said stopping device being located on the same chip as said program operation unit;

other components connected to said stopping device, said stop command causing said other components to be stopped, in addition to stopping said program operation unit with which said stopping device is associated, said other components including units which are connected to and cooperate with said program operation unit; and

a delay apparatus which, in response to receipt of said stop command, deliberately delays the stopping of said units until after the stopping of said program operation unit.

Applic. No. 09/974,924  
Response Dated September 19, 2006  
Responsive to Office Action of June 19, 2006

~~said other components including at least one further program operation unit or at least one peripheral which is not a further program operation unit, said stop command being selectively provided from said stopping device to said other component if said other component is said at least one further program operation unit and said stop command being directly provided from said stopping device to said other component if said other component is said at least one peripheral.~~

Claim 2 (currently amended): The programmable unit according to claim 1, wherein said other components include said at least one further program operation unit and said stopping device being able to stop said further program operation unit which is not associated with said stopping device.

Claim 3 (currently amended): The programmable unit according to claim 2, wherein said ~~other components which can be stopped by said stopping device~~ include units which are additionally connected to and cooperate with said ~~program operation unit~~ and ~~said~~ further program operation unit.

Claim 4 (previously presented): The programmable unit according to claim 3, wherein said units are stopped by said stopping device later in time than said program operation unit and said further program operation unit.

Applic. No. 09/974,924

Response Dated September 19, 2006

Responsive to Office Action of June 19, 2006

Claim 5 (previously presented): The programmable unit according to claim 4, including at least one bus connected between said other components.

Claim 6 (currently amended): The programmable unit according to claim 5, including bus interfaces and each of said bus interfaces is connected to one of said program operation unit and said further program operation unit and to said bus, said program operation unit and said further program operation unit function as bus masters, said delay apparatus stopping said units are stopped only when said bus masters and said bus interfaces have no more data to output and/or are no longer waiting for already requested data or data that is still to be requested.

Claim 7 (currently amended): The programmable unit according to claim 5, wherein said bus includes a first bus part, a second bus part and a bus bridge connecting said first bus part to said second bus part, said delay apparatus stopping said units are stopped only when said bus bridge has no more data to pass on.

Claim 8 (previously presented): The programmable unit according to claim 1, wherein after a stopped state of

Applic. No. 09/974,924  
Response Dated September 19, 2006  
Responsive to Office Action of June 19, 2006

components of the programmable unit which have been stopped is cancelled, said units recommence operation before said program operation unit and said further program operation unit recommence operation.

Claim 9 (original): The programmable unit according to claim 6, wherein said units function as bus slaves and after a stopped state of components which have been stopped is cancelled, only said bus slaves recommencing operation, and said bus masters recommencing operation only after said bus slaves have recommenced operation.

Claim 10 (previously presented): The programmable unit according to claim 1, wherein said stopping device is an on-chip debug support module.

Claim 11 (currently amended): A programmable unit,  
comprising:

at least one program operation unit for running a program;

a stopping device connected to said program operation unit,  
said stopping device issuing a stop command to said at least one program operation unit to stop the running of the program by said program operation unit; and

Applic. No. 09/974,924  
Response Dated September 19, 2006  
Responsive to Office Action of June 19, 2006

peripherals which are not program operation units, connected to said stopping device, ~~said stopping device issuing said stop command directly to said peripherals~~ causing said peripherals to be stopped, in addition to stopping said at least one program operation unit with which said stopping device is associated, said peripherals being stopped in response to said stop command after a deliberate delay so that said peripherals are stopped after said at least one program operation unit is stopped.

Claim 12 (canceled)

Claim 13 (currently amended): The programmable unit according to claim ~~[[12]]~~11, including at least one bus connected between said peripherals.

Claim 14 (previously presented): The programmable unit according to claim 13, including a bus interface connected to said program operation unit and to said bus, said program operation unit functioning as a bus master, said peripherals being stopped only when said bus master and said bus interface have no more data to output and/or are no longer waiting for already requested data or data that is still to be requested.

Applic. No. 09/974,924  
Response Dated September 19, 2006  
Responsive to Office Action of June 19, 2006

Claim 15 (previously presented): The programmable unit according to claim 14, wherein said bus includes a first bus part, a second bus part and a bus bridge connecting said first bus part to said second bus part, said units are stopped only when said bus bridge has no more data to pass on.

Claim 16 (currently amended): The programmable unit according to claim 11, wherein after a stopped state of peripherals of the programmable unit which have been stopped is cancelled, said ~~units~~peripherals recommence operation before said program operation unit recommences operation.

Claim 17 (previously presented): The programmable unit according to claim 11, wherein said stopping device is an on-chip debug support module.

Claim 18 (new): The programmable unit according to claim 11, wherein said deliberate delay is determined by said stop command and an indication from at least said at least one program operation unit has no further data to pass on.